

#18



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

RECEIVED

JAN 11 2002

Technology Center 2600

APPLICANT(S): Bennett et al.

EXAMINER: Cumming, W

SERIAL NO.: 09/096,560

ART GROUP: 2749

FILED: 6/12/98

Case No.: AMT-9713

ENTITLED: Home Gateway System for Home Automation and Security

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Dale B. Halling

Attorney of Record

*Dale B. Halling*

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01/10/2002 CVORACHA 00000079 09096560

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**APPEAL BRIEF**

Honorable Commissioner of  
Patents and Trademarks  
Washington, D.C. 20231

Sir:

This is an appeal from the final rejection of claims 1-19 of the Office Action dated August 2, 2001. This application was filed on June 12, 1998. Appellant submits this Appeal Brief pursuant to 35 U.S.C. §134 and 37 C.F.R. § 1.192 in furtherance of the Notice of Appeal filed in this case on April 5, 2000. The fees required under 37 C.F.R. §1.17(b) and any other necessary fees as indicated in the accompanying Appeal Brief Transmittal Letter are enclosed

### **I. Real Party In Interest**

The real party in interest is: Ameritech Corporation, a corporation organized and existing under the laws of the state of Delaware, and having a place of business at 2000 West Ameritech Center Drive, Hoffman Estates, Illinois, 60196-1025 See the Assignment recorded at Reel 9402, Frame 0643.

### **II. Related Appeals And Interferences**

There are no appeals or interferences related to the present appeal.

### **III. Status Of Claims**

Claims 1-19 (see Appendix) are pending in this application. Claims 1-19 are rejected and are involved in this appeal.

### **IV. Status Of Amendments**

There have been no amendments filed subsequent to the final rejection of August 2, 2001.

## V. Summary Of The Invention

The invention is an integration of telephony, communication, security and home automation functions into a single, cost effective package. The need for such a system is enhanced by the advent of wireless local loop services. Wireless local loop services promise to provide an inexpensive way to service the last mile. Wireless local loop services require a transmitter and receiver at the home and associated electronics so that the end user has the feeling that they are using a standard POTS (Plain Old Telephone Service) line. It makes economic and environmental sense to combine the wireless local loop electronics with other home electronic functions. For instance, processors and memory can be reused by a caller ID and answer machine and the wireless local loop box. Many security functions require communication systems to the outside world. As a result, it makes sense to combine these with the wireless local loop electronics.

The invention therefor combines wireless local loop electronics, with telephony functions, computer network functions, home automation functions and home security functions. The telephony functions include caller ID, conference calls and voice mail. The computer network allows the users to connect their computers, printers and fax machines together. In addition, the computer network allows the home automation and security functions to communicate together. The system allows a television processing system to provide interactive television functions. A smart card interface allows a user to setup a number of preprogrammed scenarios, such as how the system behaves when the family is out of town or when it is winter time or bed time.

By combining these different systems new functions can be created, the cost of the system is reduced and the environmental impact of these systems is reduced.

## **VI. Issues**

1. Whether the standard for patentability is going to revert to the subjective standards of requiring a synergistic result or unexpected result or the standard is going to be that the prior art must suggest to one skilled in the art when the invention and the prior art are view as a whole.

2. Whether claims 1-19 are unpatentable over Sizer, II, et al. (6,021,324) in view of Gorman (6,141,356) under 35 U.S.C. 103(a).

## **VII. Grouping Of Claims**

- 1) Claims 1, 3, 5, 6, 7, 15, 16 and 17 are grouped.
- 2) Claim 2 forms a group.
- 3) Claims 4, 5, 8, 9, 11, 12, 13 and 14 are grouped.
- 4) Claims 18 and 19 are grouped.

## VII. Argument

The essence of the case boils down to the correct standard for patentability or nonobviousness. The applicants do not assert that any of the elements of their invention are new. This is not required for nonobviousness see *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1 USPQ2d 1593, 1603 (Fed. Cir. 1987). The applicants do assert that the claims describe a unique combination of elements and connections that are not found in the prior art. The Examiner's response appears to be the elements are old and it would have been obvious to try the combination shown in the applicants' patent application or there is no synergy or unexpected results from the combination. The applicant does not suggest that the Examiner ever used the phrases "obvious to try", synergy or unexpected results, however this is the end result of the Examiner's reasoning. All of these standards have been rejected by the CAFC see *Gillette Co. v. S.C. Johnson & Son*, 919 F.2d 7120, 16 USPQ2d 1923 (Fed. Cir. 1990) and *Jervis B. Webb Co. v. Southern Sys., Inc.*, 742 F.2d 1388, 222 USPQ 943 (Fed. Cir. 1984). When the present application and the cited prior art are looked at as a whole there is no suggestion to create the system described in the applicants' claims, see *Medtronic, Inc. v. Cardiac Pacemakers, Inc.*, 721 F.2d 1563, 220 USPQ 97 (Fed. Cir. 1983).

The first group of claims (1, 3, 5, 6, 7, 15, 16 & 17) all require a home security controller capable of sending and receiving a message over a wireless local loop. The Examiner cites the combination of Sizer, II et al. and Gorman. Gorman is directed to a system for distributing low speed POTS (Plain Old Telephone Service) signals and high speed data signals throughout a house or small business. (See Abstract) Gorman shows a wireless local loop system 30. Sizer, II et al. shows a system for controlling

an appliance within a premise. Neither reference shows a home security controller as required by claims 1 & 15. Note claim 15 requires the steps performed by the home security controller. This element appears to be missing from both prior art references cited by the Examiner. There is a suggestion in Sizer, II, et al. for an automatic door lock, but this is not a home security controller. In addition, Sizer II, et al. does not have a separate home automation controller and home security controller as required by claim 1.

The question of obviousness requires that we determine if the references, taken as a whole, would suggest the invention to one of ordinary skill in the art. *Medtronic, Inc. v. Cardiac Pacemakers, Inc.*, 721 F.2d 1563, 220 USPQ 97 (Fed. Cir. 1983). The combination of Sizer, II, et al. and Gorman suggests a device for distributing both high-speed data service and low speed service (e.g., POTS) through a premise (Gorman Abstract) with a appliance control system that can work over a telephone line or a control channel (See Sizer, II, et al. col. 1-2, lines 60-67 & 1-2). The appliance control system would include a recording unit and wireless transmitter for generating and transmitting a packet of control information to a premise appliance (See Sizer, II, et al. col. 2, lines 3-15). Gorman suggests that the device might be used with a wireless local loop. The combination does not suggest a home security controller that is capable of sending and receiving messages over a wireless local loop or capable of communicating with the home automation controller. In addition, the combination does not suggest monitoring a parameter and sending a message over a wireless local loop if the parameter is exceeded.

The only way the Examiner can create the combination shown in the claims is to suggest that the applicants' invention was obvious to try, however this is impermissible see *Gillette Co. v. S.C. Johnson & Son*, 919

F.2d 7120, 16 USPQ2d 1923 (Fed. Cir. 1990). Thus the claims (1, 3, 6, 7, 15, 16 and 17) of group one are allowable over the prior art.

The second group of claims (2) includes a single claim to a smart card interface. The Examiner has rejected this claim upon official notice. The Examiner is not examining the invention as a whole but just pointing out that one of the elements is old. The CAFC has made it clear that this is impermissible. "The subject matter as whole" must be viewed to determine nonobviousness. *Richdel, Inc. v. Sunspool Corp*, 219 USPQ 8, 12 (CAFC 1983). As a result the Examiner's claim of Official Notice is irrelevant. The Examiner is just stating that each element taken separately is known (old). As clearly pointed out by the CAFC this tells us nothing about whether the invention as a whole is nonobvious. The Examiner has not shown that there is a suggestion or motivation to combine a smart card interface with the home gateway system of claim 1 (claim 2 depends from claim 1). Claim 2 is allowable.

The third group of claims (4, 5, 8, 9, 11, 12, 13 and 14) deal with speaker verification. Sizer, II, et al. do discuss a "voice recognition circuit 56" see (Col. 4-5, lines 59-67 & 1-15). However, it is only used for to respond to voice commands. As is clear from claim 4 the speaker verification module is part of the home security controller. The combination of Sizer, II, et al and Gorman suggests a voice recognition circuit for responding to voice commands to control an appliance. This combination does not suggest a speaker verification module as part of a home security controller. Nor does it suggest the more detailed steps of how the speaker verification method works as described in claim 12 & 13. The third group of claims is allowable over the prior art.

The fourth group of claims (18 & 19) require a home automation controller and a home security controller connected to the wireless local



loop transceiver and speaker verification (claim 19). The question of obviousness requires that we determine if the references, taken as a whole, would suggest the invention to one of ordinary skill in the art. *Medtronic, Inc. v. Cardiac Pacemakers, Inc.*, 721 F.2d 1563, 220 USPQ 97 (Fed. Cir. 1983). The combination of Sizer, II, et al. and Gorman suggest a device for distributing both high-speed data service and low speed service (e.g., POTS) through a premise (Gorman Abstract) with a appliance control system that can work over a telephone line or a control channel (See Sizer, II, et al. col. 1-2, lines 60-67 & 1-2). The appliance control system would include a recording unit and wireless transmitter for generating and transmitting a packet of control information to a premise appliance (See Sizer, II, et al. col. 2, lines 3-15). Gorman suggests that the device might be used with a wireless local loop. The combination does not suggest a home security controller that is capable of sending and receiving messages over a wireless local loop or capable of communicating with the home automation controller. In addition, the combination does not suggest speaker verification.

The only way the Examiner can create the combination shown in the claims is to suggest that the applicants' invention was obvious to try, however this is impermissible see *Gillette Co. v. S.C. Johnson & Son*, 919 F.2d 7120, 16 USPQ2d 1923 (Fed. Cir. 1990). Thus the claims (18 and 19) of group four are allowable over the prior art.

The Examiner's rejection of the claims is based on viewing the invention and the prior art as separate parts (steps) and not viewing the invention as a whole. See *Medtronic, Inc. v. Cardiac Pacemakers, Inc.*, 721 F.2d 1563, 220 USPQ 97 (Fed. Cir. 1983). The combination suggested by the prior art references does not lead to the applicants' invention as defined in the claims unless one uses impermissible hindsight. See *Panduit*

*Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1 USPQ2d 1593, 1603 (Fed. Cir. 1987). All four groups of claims are allowable.

## IX. Appendix Of The Appealed Claims

1. A home gateway system for home automation and security comprising:

a wireless local loop transceiver capable of establishing a wireless local loop point to point link to a geographically separated, non-mobile base station which is attached to the PSTN;

a home automation controller capable of sending and receiving a message with the wireless local loop transceiver; and

a home security controller capable of sending and receiving a message with the wireless local loop transceiver and the home automation controller.

2. The home gateway system of claim 1, further including a smart card interface capable of sending a plurality of instructions to the home automation controller.

3. The home gateway system of claim 1, further including a voice processing system coupled to the home security system.

4. The home gateway system of claim 3, wherein the voice processing system includes a speaker verification module.

5. The home gateway system of claim 3, wherein the voice processing system includes a speech recognition module.

6. The home gateway system of claim 1, further including a switch connecting the wireless local loop telephony connection to the home security controller.

7. The home gateway system of claim 1, further including a plurality of sensors connected to the home security controller.

8. A method of operating a home gateway system for home automation and security, comprising the steps of:

(a) receiving a request for access to a home automation and security features from a user through a wireless local loop point to point link from a geographically separated non-mobile base station which is attached to the PSTN;

(b) performing a speaker verification of the user;

(c) when the user is verified, allowing the user access to the home automation and security features; and

(d) receiving a voiced instruction.

9. The method of claim 8, wherein step (a) further includes the steps of:

(a1) inputting an electronic address of the home gateway system by the user;

(a2) establishing an electronic connection with the home gateway system;

(a3) selecting the home automation and security features from a plurality of options.

10. The method of claim 9, wherein the step of inputting the electronic address includes the step of dialing a phone number.

11. The method of claim 9, wherein the step of establishing the electronic connection includes the step of setting up a wireless local loop telephony connection.

12. The method of claim 8, wherein step (b) further includes the steps of:

(b1) requesting a user to speak an access code;

(b2) performing a speech recognition on the access code;

(b3) when the access code is recognized and belongs to a set of approved access codes, performing a speaker verification;

13. The method of claim 12, further including the steps of:

(b4) when the speaker verification fails, requesting a user enter a personal identification number.

14. The method of claim 8, further including the steps of:

(e) performing a speech recognition of the voiced instruction;  
(f) converting the voiced instruction into an electronic instruction;  
(g) sending the electronic instruction to a home automation and security controller.

15. A method of operating a home gateway system for home automation and security, comprising the steps of:

(a) monitoring a parameter;  
(b) when the parameter exceeds a defined range, sending a message containing an electronic address to a processor;  
(c) establishing a communication link to the electronic address over a wireless local loop, wherein the wireless local loop point to point link is through a geographically separated non-mobile base station which is attached to the PSTN; and  
(d) transmitting the message to the electronic address.

16. The method of claim 15, wherein step (b) further includes the step of:

(b1) when the parameter is a forceful entry signal, sending the message that contains a police telephone number to the processor.

17. The method of claim 15, wherein step (d) further includes the step of:

(d1) speech synthesizing a portion of the message to form an audio message;

(d2) transmitting the audio message to the electronic address.

18. A home gateway system for home automation and security comprising:

a wireless local loop transceiver capable of establishing a wireless local loop point to point link to a geographically separated, non-mobile base station which is attached to the PSTN;

a switch connected to the wireless local loop transceiver;

a processor connected to the switch;

a voice processing system connected to the processor;

a router coupled to the switch;

a home automation controller connected to the router; and

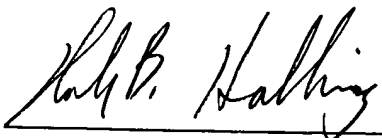
a home security controller connected to the router.



19. A method of operating a home gateway system for home automation and security, comprising the steps of:

- (a) dialing a telephone number of the home gateway system by a user;
- (b) establishing a wireless local loop connection with the home gateway system;
- (c) selecting a home automation and security features from a plurality of options;
- (d) performing a speaker verification of the user;
- (e) when the user is verified, allowing the user access to the home automation and security features;
- (f) receiving a voiced instruction to setup a home security controller in a warning mode;
- (g) monitoring a forceful entry signal;
- (h) when the forceful entry signal exceeds a defined range, sending a message containing a police telephone number to a processor;
- (i) establishing a communication link to the police telephone number over a wireless local loop; and
- (j) transmitting the message to the police telephone number.

Respectfully submitted,  
(Bennett et al.)

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<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence after initial filing)</i>	Application Number	09/096,560	
	Filing Date	06/12/1998	
	First Named Inventor	Bennet et al	
	Group Art Unit	2749	
	Examiner Name	Cumming, W.	
Total Number of Pages in This Submission	17 x (3)	Attorney Docket Number	AMT-9713

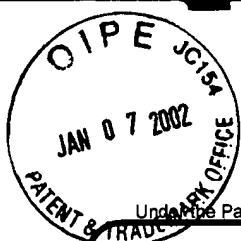
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<input type="checkbox"/> After Final	<input type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
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<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
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<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

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Firm or Individual name	Dale B. Halling
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# FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$) 320.00

## Complete if Known

Application Number 09/096,1998  
Filing Date 06/12/1998  
First Named Inventor Benner et al  
Examiner Name Cumming, W.  
Group Art Unit 2749  
Attorney Docket No. AMT -9713

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## METHOD OF PAYMENT

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number

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☐ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☐ Payment Enclosed:

☐ Check ☐ Credit card ☐ Money Order ☐ Other

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity Small Entity

Fee Code Fee Code Fee Description

Fee Code	Large Entity (\$)	Small Entity (\$)	Fee Description	Fee Paid
101	740	201	370	Utility filing fee
106	330	206	165	Design filing fee
107	510	207	255	Plant filing fee
108	740	208	370	Reissue filing fee
114	160	214	80	Provisional filing fee

SUBTOTAL (1) (\$)

### 2. EXTRA CLAIM FEES

Total Claims  -20\*\* =  X  =   
Independent Claims  -3\*\* =  X  =   
Multiple Dependent  =

Large Entity Small Entity

Fee Code Fee Code Fee Description

Fee Code	Large Entity (\$)	Small Entity (\$)	Fee Description	
103	18	203	9	Claims in excess of 20
102	84	202	42	Independent claims in excess of 3
104	280	204	140	Multiple dependent claim, if not paid
109	84	209	42	** Reissue independent claims over original patent
110	18	210	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Fee Code	Large Entity (\$)	Fee Code	Small Entity (\$)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for ex parte reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	400	216	200	Extension for reply within second month	
117	920	217	460	Extension for reply within third month	
118	1,440	218	720	Extension for reply within fourth month	
128	1,960	228	980	Extension for reply within fifth month	
119	320	219	160	Notice of Appeal	
120	320	220	160	Filing a brief in support of an appeal	320.00
121	280	221	140	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,280	241	640	Petition to revive - unintentional	
142	1,280	242	640	Utility issue fee (or reissue)	
143	460	243	230	Design issue fee	
144	620	244	310	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CFR 1.17(q)	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))	
179	740	279	370	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 320.00

## SUBMITTED BY

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*Dale B. Halling*

Date

11/02/2001

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